

# Alabama Educational Television Commission

## Telecommunications Battery Charger

- 1.0** Alabama Educational Television Commission is requesting bids for battery chargers to be used at both transmitter and microwave relay stations to provide DC voltage and battery charging for our -48V systems. Over the next 12 months, AETC will be upgrading and replacing the current system at over thirty locations. The initial purchase will be ten (10) units with an additional 25 to be purchased on a second order within the twelve month time frame. Some of the current locations have -24V systems which will be converted to -48V with the initial order. As other work is being done at the remaining locations, the current chargers will be changed out to new units. An example of the type unit requested is C & D Technologies' Sageon Micro Power Module; however any manufacturer's equivalent unit that meets bid specifications is acceptable.

**2.0 EQUIPMENT SPECIFICATIONS**

- 2.1 The system shall supply -48VDC (positive ground) at up to 80 amps of current.
- 2.2 The AC input voltage shall be within the range of 90 to 275 volts 60 Hz. Nominal inputs will be 120, 208 or 240 volts.
- 2.3 The unit must fit within a standard 19 inch rack and be no more than 3 rack units in height.
- 2.4 The unit shall limit the battery charge current to protect the batteries from overcharging.
- 2.5 A low voltage disconnect shall be included with each unit.
- 2.6 The unit shall provide an internal ground return bus.
- 2.7 The unit shall have a soft start with ramp up of at least eight seconds to full load.
- 2.8 Inrush current shall be less than eight amps per rectifier module.
- 2.9 The unit shall include temperature protection to prevent thermal overload of rectifiers.
- 2.10 The unit shall continue to operate without the controller if the main controller should fail in order to provide continuous reliability.
- 2.11 The unit's controller shall include a local display and controls to allow users to view and adjust parameters and alarms.
- 2.12 The unit shall include a software tool to exchange configurations and operating data between the unit and a PC. The PC shall be able to connect either locally to a USB port or remotely by Ethernet/SNMP and shall be field changeable.
- 2.13 Unit shall have an integrated battery disconnect.

### **3.0 SERVICE AND WARRANTY REQUIREMENTS**

- 3.1 Each bidder shall guarantee all equipment as represented in their bid against defects in materials and workmanship for a period of one (1) year minimum. The successful bidder further guarantees to replace or repair, without cost to the Owner, any items that become defective within the warranty period when the defect is clearly a fault of the manufacturer and not of misuse. This will include shipping to and from manufacturer for repairs or return of defective equipment.
- 3.2 Bidder's other standard terms, conditions and warranties will be accepted.

### **4.0 QUANTITY TO BE PURCHASED**

- 4.1 Ten (10) units will be purchased with the initial bid. An additional 25 units will be purchased within a twelve month period utilizing the same pricing structure. Bids shall be based on a per-unit price with the price guaranteed for 12 months.
- 4.2 Units will be shipped to the AETC main office at Alabama Educational Television, 2112 11<sup>th</sup> Avenue S., Suite 400, Birmingham, Al 35205.
- 4.3 The bid price must include shipping to the above location.